

Scirpus saximontanus (Fernald) J. Raynal

Rocky Mountain bulrush

Cyperaceae (Sedge Family)

Status: State Threatened

Rank: G5S1

General Description: Adapted from FNA (2002): This annual or perennial graminoid has culms stems that are often arching or lying on the ground. The stems are cylindric, ridged when dry, 4 to 25 in. (9-65 cm) long, and up to 1/16 in. (0.5 to 1.5 mm) wide. There are 3 to 4 leaves. The leaf blades are C-shaped in cross section and less than 1/16 in. to 7 3/4 in. (0.1 to 20 cm) long. The inflorescences are up to 1/2 in. (15 mm) long. The inflorescence bract is erect, similar to the leaf blades, and 2 to 6 in. (5 to 15 cm) long. There are 1 to 20 spikelets that are 1/4 to 3/4 in. (6 to 20 mm) long. The scales of the flowers are pale orange-brown to colorless, with a small awn and hairy margins. The anthers are 0.3 to 0.5 mm, and there are 3 styles. The achenes (fruits) are blackish brown, sharply three-angled, cross-wrinkled ovoid to obovoid, 1/16 in. (1.3 to 1.8 mm) long, ridged, and with a beak that is less than 0.1 mm.

Identification Tips: In the Pacific Northwest this species is generally an annual. Other distinguishing characteristics include the nature of its achenes and whether perianth bristles are present or absent. *S. saximontanus* is a fibrous rooted annual that is rarely over 11 1/4 in. (30 cm) tall, its achenes are prominently cross-wrinkled, and its perianth bristles are absent. *S. tabernaemontani*, *S. americanus*, and *S. pungens* are rhizomatous perennials that are usually well over 11 1/4 in. (30 cm) tall, their achenes are smooth or cellular net-veined, and they have perianth bristles (Douglas et al. 2001). A technical key is recommended for identification.

Phenology: Throughout its range this species is identifiable from spring to fall. In Washington it was found in August.

Range: This species is known from British Columbia, California, and the Great Plains and Southwestern states. This species is disjunct in Washington, and is only known from Spokane County.

Habitat: Throughout its range *S. saximontanus* is found in damp soils, freshwater ponds, ditches, and vernally moist areas. In Washington, this species has been found growing on moderately alkaline, drying mudflats at 2300 feet (700 m) elevation. Associated species in Washington include needleleaf navarretia (*Navarretia intertexta*), centaury (*Centaureum* spp.), dwarf spikerush (*Eleocharis parvula*), Northwestern yellow-flax (*Sclerolinon digynum*), lesser Indian paintbrush (*Castilleja minor*), reed canarygrass (*Phalaris arundinacea*), creeping bentgrass (*Agrostis stolonifera*), and Canada bluegrass (*Poa compressa*).

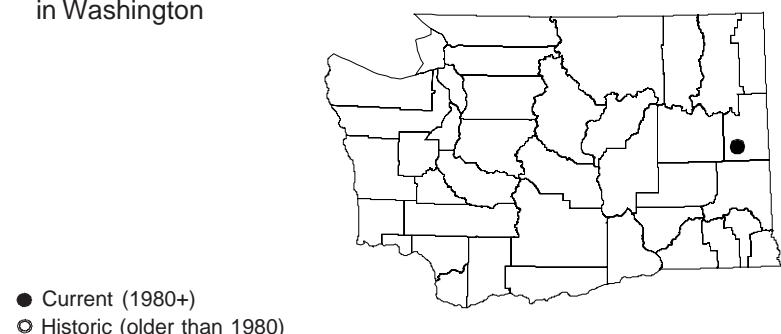
Scirpus saximontanus

Rocky Mountain bulrush



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Known distribution
of *Scirpus saximontanus*
in Washington



Scirpus saximontanus

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Ecology: The habitat favored by this species is subject to invasion and dominance by reed canarygrass (*Phalaris arundinacea*).

State Status Comments: There are less than 5 populations known from Washington, all from a single county.

Inventory Needs: Lakeshores and alkaline areas in Spokane County should be systematically surveyed for additional populations.

Threats and Management Concerns: Current threats include changes in the hydrological regime and habitat loss, especially due to grazing.

Comments: Hitchcock et al. (1969) do not list this species. *Schoenoplectus saximontanus* (Fern.) Raynal is a synonym for this species. Keys can be found in Douglas et al. (2001) and FNA (2000).

References:

Bjork, C. Personal Communication with the Washington Natural Heritage Program.

Douglas, G.W., G.B. Straley, D. Meidinger, and J. Pojar. 2001. *Illustrated Flora of British Columbia* vol. 6: *Monocotyledons (Acoraceae Through Najadaceae)*. Ministry of Environment, Lands and Parks, Victoria, British Columbia. 361 pp.

Flora of North America Editorial Committee eds. 2002. *Flora of North America North of Mexico Volume 23: Magnoliophyta: Commelinidae (in part): Cyperaceae*. Oxford University Press, New York, NY. 608 pp.

Hitchcock, C.L., A. Cronquist, M. Ownbey, J.W. Thompson. 1969. *Vascular Plants of the Pacific Northwest Part 1: Vascular Cryptogams, Gymnosperms, and Monocotyledons*. University of Washington Press, Seattle, WA. 914 pp.